

Appl No. 10/673,483
Amd. dated June 9, 2006
Reply to Office Action dated March 9, 2006

Remarks

We thank the examiner for his efforts to date, and for the allowance of claims 4-20 and 22-23.

Claim 1 has been amended to clarify the invention, namely clarifying that said predetermined angle is varied in accordance with a predetermined pattern. Support for this amendment can be found, for example, in paragraph 10 and 33, and throughout.

Claims 22 and 23 have been amended to correct an error in their dependencies, as they should have depended from claim 21 and not claim 20.

Claims 1-3, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ahl et al. (U.S. Pat-5448753).

The rejection is traversed as follows. Ahl simply does not teach the invention as claimed. Without limiting the generality of the foregoing, with respect to the rejection of claim 1, the official action bases the rejection, at least in part, by stating Ahl teaches:

(b) rotating said downlink beam by a predetermined angle (fig. 14, col. 4, line 64 to col. 5, line 6);

With respect, Ahl does not disclose rotating said downlink beam *by a predetermined angle*.

Rather, this section, and Ahl generally, teaches steering a beam dependent on the location of the users, and not based on a predetermined angle as claimed. Indeed, this can be seen from the section cited by the examiner in the rejection (referencing Ahl, col. 4 line 64- to col. 5, line 6):

"FIG. 14 shows a simplified arrangement to which there is applied a dynamic time slot allocation *in dependence of the traffic for each central station* independent of traffic analyse on other central stations. To minimize the interference between central stations the scanning beam or beams at each central station can be phase delayed and/or combined with a quality detection to perform communication as mentioned above. Thus, in this way risk of interference is minimized without a dynamic traffic coordination between none-adjacent central stations." (emphasis added)

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Other sections of Ahl clarify that it directs its antenna based on the location of users, and not on a predetermined angle. For example, column 4, lines 1 - 6 clarifies that the beam is directed to one specific peripheral station (user) :

"The system includes a central station antenna which is *directed towards one specific peripheral station* during short time intervals during which information is transferred, so as to achieve optimized signal strengths and minimized interference for the normal information exchange."
(emphasis added)

Accordingly, it is clear that Ahl teaches a beam steering system which directs its beams to users, and not on the basis of a predetermined angle. Ahl teaches a system which directs its beams to towards specific users, whereas we rotate the beam based on a predetermined angle which is independent of the location of said users.

Furthermore, and without limiting the generality of the foregoing, Ahl fails to teach element d of claim 1. Specifically, Ahl does not teach repeating the steps until the entire area of cell is covered, as claimed. The cited sections (and Ahl generally) teaches repeating its transmissions repeatedly, but simply does not teach repeating the steps until the entire area of the cell is covered. Once again, this is because Ahl directs its beams to specific users, dependent on the location of the users, rather than rotating the beam by a predetermined angle and then repeating until the entire area of the cell is covered.

Accordingly, even without the amendment we are hereby making to claim 1, Ahl simply fails to teach each of the elements of claim 1. Accordingly we are amending claim 1 for clarification purposes, and the amendment is not needed for patentability over Ahl. In any event, Ahl clearly does not teach rotating the beams by a predetermined angle dependent on a predetermined pattern as claimed in amended claim 1.

Consequently, it is submitted that claim 1, and therefore claims 2 and 3 are not anticipated by Ahl, and withdrawal of the rejection is hereby requested.

With respect to the rejection of claim 21, Ahl simply does not teach the invention as claimed. Without limiting the generality of the foregoing, the cited sections and figures do not teach steps (b), (c) or (d) of claim 21. Claim 21 claims a first rotation scheme in element (a) and a

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second rotation scheme in element (b). None of the cited passages or figures of Ahl teach both first and second rotation schemes.

Claim 21 includes element: "(c) identifying different timeslots with varying quality created by said first and second rotation schemes." None of the sections that the examiner relies on to teach element (c) teach identifying different timeslots with varying quality. In particular, we note the following:

- Ahl Fig. 5-6 discussed prior art. It shows that interference is caused when the transmissions are repeated without any timing consideration (Col2 line 65). However this section does not teach the identification of time slots with varying quality.
- "Abstract": This does not teach "identifying time slots with varying quality".
- Col 3 - Lines 43-65 : Discusses using position information when assigning time slots and controlling direction and does NOT teach identifying time slots with varying quality
- Fig 9-10 and Col 4 - Lines 1-22: Discusses directing the antenna towards a specific user to avoid interference and improve quality. It does NOT teach " identifying time slots with varying quality" as we claimed.
- Fig 18 and Col 5 Lines 46 to Col 6 line 2: This talks about directing the antenna toward the user when the user is assigned for transmission and directing it to the next user during the next time slot. Once again, there is no mention identifying time slots with varying quality" as we claimed.

Similarly regarding claim element (d), none of the cited passages or figures teach the claimed element.

Consequently the rejection is improper, and withdrawal of the rejection to claims 21 (and its dependent claims) should be withdrawn.

In view of the foregoing remarks, it is submitted that all of the claims are now allowable, and allowance is hereby requested.

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No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

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